

A DEFINITIVE NEW BOOK ON THE FLORA OF NORTHWESTERN NORTH AMERICA¹

From the rich experience of many weeks and months in the field working closely with the plants he has written about, coupled with thousands of hours of study in herbaria and libraries in many parts of the world, Dr. Eric Hultén has drawn the material presented in a Flora of Alaska and Neighboring Territories. This is a superb book in every respect. Without question, it will be the standard and authoritative reference concerning plants of the region it covers for many years to come. That region includes, besides Alaska, the Chukchi (Chukotka) Peninsula in northeastern Siberia, the Yukon, extreme northwestern British Columbia and the Mackenzie District of the Northwest Territories, Canada.

A distinctive feature of this book is the fact that each species or infraspecific taxon is individually illustrated and maps of its range within the area covered and of its total geographical range are given. The line drawings of each ultimate taxon were prepared by the well-known botanical artist Mrs. Dagny Tande-Lid. These are botanically accurate and artistically pleasing. There are eight full pages of color including forty-nine photographs, all of excellent quality. These are in one section near the middle of the book. They show dramatically some of the varied environments available to plants in the area and some of the more spectacular and interesting plants of the flora.

Long descriptions of the individual taxa are not a feature of Hultén's book and we view this as a step in the right direction. The short descriptions, illustrations and maps are adequate to fix the identity of each taxon. Keys to the families, genera, species and infraspecific taxa are complete. Some 1,974 taxa belonging to 1,559 species are treated in the work.

¹Flora of Alaska and Neighboring Territories: A Manual of the Vascular Plants, by Eric Hultén. Stanford University Press, Stanford, Calif. xxii + 1008 pp. illus. \$35.

Some very involved taxonomic problems are present in the flora dealt with by Hultén. The species of some genera are largely apomictic and in other genera there is an unusual amount of hybridization. In other instances, such as the genus *Carex* with one hundred and twenty taxa, it is the complexity and great reticulate divergence that makes a satisfactory taxonomic treatment difficult. Thirty-four species of *Draba* are treated and here is one case where this is the only satisfactory taxonomic treatment of the genus for the area. One is impressed again with the enormous number of herbaceous species compared to the woody plants of the flora and with the relatively high proportion of monocotyledons vs. dicotyledons. This, of course, is expected in an arctic and subarctic region. But there are large numbers of species in some genera that are rather unexpected. For example, twenty-two taxa of *Pedicularis* seem somewhat unreal when considered from the viewpoint of representation in the rest of North America.

Eric Hultén has studied the plants of the North circumpolar region assiduously and with perseverance for nearly fifty years. He began with an expedition to the Kamchatka Peninsula in 1920. Later he made numerous collections in the Aleutian Islands and the islands of the Bering Straits. His field work included extended periods along coastal Alaska, in the interior of that State and throughout northwestern Canada as well as along the Arctic shores of both Canada and Alaska. In fact, his field research has continued down through the last few years right to the present, in spite of his retirement status.

I remember and still appreciate the wonderful stories Hultén told of his experiences in the unexplored part of Kamchatka, not the least of which were those concerning his unintentional involvement in the dying phases of the Communist Revolution then in progress in southern Kamchatka. With other graduate students in the 1930's, we were privileged to hear accounts of his botanical exploits in the Aleutian Islands and in Northwest America. At the time, he was at the Gray Herbarium studying the collections he had brought back from these remote places.

In building toward the book under review, which in a way is a culminating presentation of a major aspect of the basic findings of a lifetime, Dr. Hultén has proceeded in a very deliberate and resourceful way. His early publication on the Flora of Kamchatka was followed by a book on the Flora of the Aleutian Islands. Then followed an "Outline of the History of Arctic and Boreal Biota during the Quaternary Period". A major contribution was his "Flora of Alaska and Yukon" published between 1941 and 1950. The *Amphi-Atlantic Plants and their Phytogeographical Connections*, published in 1958, treated many arctic or subarctic taxa pertinent to the present work and the relevance of the more recent "Circumpolar Plants" is at once apparent. All of these were major contributions and show in a very positive way the full depth of the author's background for writing the book at hand.

The volume is excellently produced with a good quality of paper and a pleasing format. Although the cost may make it prohibitively expensive for many individuals, libraries and institutions having any interest at all in the plant cover of a large segment of North America cannot afford to be without this highly significant book.

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